

REMARKS

Reconsideration and allowance of the above referenced application are respectfully requested.

The indefiniteness noted in claim 33 has been corrected herein.

Claims 31 and 33-36 stand rejected under 35 USC 103 as allegedly being unpatentable over Novik. Claim 31 has been amended to emphasize its patentable distinctions. It is believed that Claim 36 was already patentable, but Claim 36 has nonetheless been amended to better emphasize its patentable distinctions.

Claim 31 defines obtaining an original medical image, and sending a compressed version of that image from a first location to a second location. An evaluating person at the second location selects a region of the compressed medical image. That is sent back to the first location, and then the medical analysis is carried out on the original medical image at the first location. In this way, the original medical image need never be sent outside the first location.

An advantage of this technique is that the original medical image can be processed at the original medical location. It does not need to be copied and/or sent. However, a human can

review and evaluate a compressed version of the image, and send back indications of suspicious looking areas.

Compressed and uncompressed images often look the same to a human observer. Therefore, a human observer can easily analyze an uncompressed image to look for suspicious locations. However, any detail in this analysis is often carried out, e.g. pixel-by-pixel, based on the uncompressed image.

When an extremely high-resolution image is obtained, that image may be many megapixels, and sending that image to a remote location may take large amounts of bandwidth. The inventors found that it makes much more sense to analyze the image at the original location where the original medical image has first been stored. The original medical image is never sent out: it is analyzed at the first location.

This is in no way taught or suggested by the cited prior art. The rejection admits that Novik does not teach medically analyzing the area. The rejection makes an argument about why it would be obvious for Novik to do so. However, note that everything in Novik teaches sending all the image data to a second location for analysis. See, for example, column 5 lines 29-31. The idea of Novik is that an area of interest in the image can be found, and then after finding that area of interest in the image, more detail about that area can be sent back to the remote area. See, for example, column 10 lines 38-57.

Novik teaches sending the image to a second area to be processed. There is no teaching or suggestion of Claim 1, which requires analyzing the area of interest in the second location (in some claims the "remote view" location) and then calculating the medical analysis at the first location based on the contents of the original medical image. By carrying out the detailed analysis at the first location, the original medical image can be used: it is not a second-generation copy, has never been transmitted over a network, and therefore the possibility of any distortion in the image is minimized. Moreover, the original medical image can be as large as desired. No bandwidth limitations make any difference, since the original medical image is the one on which the medical analysis is carried out.

Claim 43 defines obtaining a score indicative of the image. This was the subject matter of original Claim 38 which was rejected based on Novik in view of Echerer et al. While Echerer et al. does teach analyzing an x-ray image, it teaches nothing about using an uncompressed image to analyze regions of interest at a remote view station, and then analyzing only the identified region of interest on the original medical image to find a score. Presumably Echerer et al. would score the entire image, and as such would not pay as much attention to the area of interest. Therefore, Claim 43 is completely allowable.

Claim 36 should be allowable for reasons discussed above.

Specifically, Claim 36 defines an image server that gets an original medical image, sends a compressed version to a second location to be evaluated by a person and that the person selects a region to be used analyze further, and then analyzes the identified portion original medical image again at the first location. The original medical image need never leave the first location. A pixel-by-pixel analysis with a maximum probability of being correct can be carried out. This is not taught or suggested by the cited prior art, and should be allowable. Once again, this takes advantage of both uncompressed images looking the same to a human, and therefore the human can identify regions of interest in the compressed image. However, the original image is used to obtain the maximum probability of successful analysis of the original image.


It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any

claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant asks that all claims be allowed. No fee is believed to be due, however please apply any applicable charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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